Figure 6A is a profile of the results of combined treatment with 5-fluorouracil and anti-VLA-4 murine monoclonal antibody HP1/2. Symbols are as described for Figure 3.

Figure 6B is a profile of the results of 5-fluorouracil treatment alone.

Figure 7A is the nucleotide sequences of the V_H-encoding regions having CDR-encoding sequences from murine HP1/2 transplanted therein. (SEQ ID NO:3)

Figure 7B is the nucleotide sequence of the transplanted V_K sequence. (SEQ ID NO:4)

Figure 8A is a nucleotide sequences encoding the variable regions of the heavy and light chains of the humanized anti-VLA-4 antibody hHP1/2 encoding the V_H region. (SEQ ID NO:5)

Figure 8B is the nucleotide sequence encoding the V_K region. (SEQ ID NO:6)

Figure 9 is a profile of the results of treatment with humanized anti-VLA-4 antibody hHP1/2. Symbols are as described for Figure 3.

Figure 10 is a profile of the results of treatment with murine Fab fragments of anti-VLA-4 antibody HP1/2. Symbols are as described for Figure 3.--

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For the Examiner's convenience, applicants are submitting herewith substitute pages with these changes indicated.

IN THE CLAIMS:

Please amend the claims as follows:

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1. (Amended) A method of peripheralizing CD34+ cells <u>in vivo</u> comprising the steps of administering [a blocking agent of] <u>an anti-VLA-4 antibody or an anti-VCAM-1 antibody which blocks the binding of</u> VLA-4 antigen on the surface of the CD34+ cells <u>to VCAM or fibronectin</u>.

2. (Amended) The method according to claim 1, wherein the [blocking agent is selected from the group consisting of] anti-VLA-4 or anti-VCAM-1 antibody [which may optionally be] <u>is a mouse/human, chimeric, single chain, or humanized or Fab, Fab', $F(ab')_2$ or F(v) fragments thereof</u>, ~~fibronectin, fibronectin having an alternatively spliced non-type III connecting segment, fibronectin peptides containing the amino acid sequence EILDV or a similar conservatively substituted amino acid sequence that blocks VLA-4 mediated~~

adhesion, soluble VCAM-1, bifunctional VCAM-1/Ig fusion proteins and VCAM-1 peptides.

4. (Amended) The method of claim 1, further comprising the step of administering a cytokine or 5-fluorouracil as a stimulating agent of CD34+ cell proliferation in vivo.

5. (Amended) The method according to claim 2, further comprising the step of administering a cytokine or 5-fluorouracil as a stimulating agent of CD34+ cell proliferation in vivo.

6. (Amended) The method according to claim 3, further comprising the step of administering a cytokine or 5-fluorouracil as a stimulating agent of hematopoetic stem cell proliferation in vivo.

7. (Amended) The method according to claim 4, wherein the stimulation is mediated [by 5-fluorouracil or]a cytokine selected from the group consisting of granulocyte colony-stimulating factor (G-CSF), stem cell factor, granulocyte-macrophage colony-stimulating factor (GM-CSF), macrophage colony-stimulating factor (M-CSF), totipotent stem cell factor (T-SCF), stem cell proliferation factor (SCPF), interleukin-1 (IL-1), interleukin-2 (IL-2), interleukin-3(IL-3), interleukin- 4(IL-4), interleukin- 6(IL-6) and interleukin- 11(IL-11).

8. (Amended) The method according to claim 5, wherein the stimulation is mediated by [5-fluorouracil or] a cytokine selected from the group consisting of ~~G-CSF, stem cell factor, GM-CSF, M-CSF, T-SCF, SCPF, IL-1, IL-2, IL-3, IL-4, IL-6 and IL-11.~~

9. (Amended) The method according to claim 6, wherein the stimulation is mediated by [5-fluorouracil or] a cytokine selected from the group consisting of ~~G-CSF, stem cell factor, GM-CSF, M-CSF, T-SCF, SCPF, IL-1, IL-2, IL-3, IL-4, IL-6 and IL-11.~~

13. (Amended) The method according to claim 10, wherein the [cytokine] G-CSF is administered before administering the [blocking agent of a] anti-VLA-4 antibody or anti-VCAM-1 antibody [VLA-4 antigen on the surface of the CD34+ cells].